

Our Expanding Urban Coast: A Threat to the Marine Environment and Human Health Outcomes of the GPA Online Dialogue

*On 19-30 June, Stakeholder Forum, in collaboration with UNEP/GPA, hosted an online dialogue on the theme of **Our Expanding Urban Coast: A Threat to the Marine Environment and Human Health**. The online dialogue aimed to explore the links between the marine environment, coastal urbanization and **Physical Alteration and Destruction of Habitat, Integrated Management Approaches, and Nutrients**, with a view to developing recommendations on processes and policies to address these issues at the global, regional, and national level, the role of Global Programme of Action (GPA) in addressing these issues, and the potential role of various stakeholders. The following is a summary of the key points discussed during the dialogue.*

Integrated Management Approaches

The importance of engaging stakeholders in the GPA process was highlighted throughout the online dialogue, and particularly stressed in reference to planning processes and integrated management. The identification and inclusion of all relevant stakeholders in an open and transparent planning process was considered critical if integrated management is to succeed in defining solutions that are directly applicable to the context and ecosystem conditions. Key stakeholder groups identified by participants include: government institutions operating on a national, district and local level; non-governmental institutions and NGOs; universities and research institutions; development agencies and banks; local small-scale fishermen; the local population more generally; private developers; coastal processing industries, the tourism industry, the intensive agriculture industry and the coastal mining industry. It was also noted that some threats to the coastal marine environment stem from locations beyond the often densely populated 100km coastal strip, and that it is important to identify and plan for the root causes of environmental challenges.

Participants underlined the important role of the local population or “community”, emphasising the need to not only include them in integrated management approaches, but to raise awareness of the threats to the coastal marine environment and alternative sustainable living options. It was noted that integrated management approaches should take into account a community’s people, the area they occupy, their culture, norms, language, beliefs, and shared interests. The need for communities to take ownership of the integrated management process was highlighted. Overall, it was recommended that planning within integrated management approaches should be geared towards ensuring enhanced social, economic and ecological development of the community and region concerned.

Education was identified as essential to support the meaningful participation of local communities in integrated management approaches and, more generally, as a tool for the GPA to promote integrated management approaches and the mainstreaming the GPA. It was noted that formal, non-formal and informal educators have an important role in providing environmental education and that environmental education should link knowledge with action and community problem-solving. With reference to Agenda 21 and the Johannesburg Plan of Implementation, it was argued that the GPA's impact and effectiveness is dependent upon learning processes – access to knowledge that links the global to the local, accurate judgement and assessment of concrete actions and measures, monitoring, planning, design, risk assessment, etc. is highly dependent upon education as a cross cutting issue. The International Decade of Education for Sustainable Development (ESD) was highlighted as a best practice.

The dialogue on Integrated Management Approaches featured specific examples from Colombia, Mexico and Vietnam.

Physical Alteration and Destruction of Habitat (PADH)

Privatization was considered by participants to be a major driver of Physical Alteration and Destruction of Habitat. The role of the tourism industry in exacerbating environmental and social problems through its contributions to PADH and exclusion of the local community from the best stretches of coastline through privatisation was noted. A participant elaborated that the privatization of coastlines often means that ecologically critical services such as sewage treatment and garbage disposal are externalized or not adequately considered by developers and states alike- the unwillingness to pay for or provide these essential services is a crucial factor in the continuous degradation of coastal habitats. Discussions on PADH focused largely on policy instruments to safeguard against the destruction of coastal resources and habitats and the role of the private sector in preventing PADH.

The need for policy instruments at the national level to prevent the complete privatisation of the coastline was considered essential to mitigate against PADH. It was suggested that policies be put in place that focus on overseas private investment or which ensure that a certain percentage of sold land on the coast is not developed. The benefits of establishing a network of Marine Protected Areas (MPAs) for the preservation and rehabilitation of ecosystems in order to promote biodiversity were also underlined. Furthermore the need to harmonise national actions with international and regional conventions, plans and activities was recognised.

Policies that promote education were also emphasised as a means to safeguard against PADH. One participant named a Bill of Rights for Future Generations (e.g. <http://www.ces.clemson.edu/~simms/cousteau/wf8.1>) as one example of a policy instrument that could help PADH. The National Program of Investigation in Marine and Coastal Biodiversity of Colombia was also cited as a specific example. This national programme aims to disclose the required knowledge for the execution of the commitments made by Colombia in the Convention on Biological Diversity and specifically the Jakarta Mandate. The objective of this programme is to popularization of knowledge on the components of the marine and coastal biodiversity, with emphasis in those identified as strategic, important and high-priority for the adoption of actions apt to its conservation and sustainable use. Further examples of policy instruments included a Strategy for Environmental Education in order to link the global, regional, national to the local; and citizen action/community problem-solving. Echoing suggestions made in the Integrated Management Approaches discussion, participants further elaborated that local coastal communities should not only be educated but empowered in the sense of acquiring skill to behave environmentally sustainable and maintain their livelihoods.

Dialogue participants suggested that the private sector could contribute to the safeguarding against alterations and destruction of coastal resources and habitats by providing financial resources, and intellectual capital on maintaining and strengthening coastal areas, and by contributing to monitoring and reporting. The need to develop incentives to protect coastal ecosystems and interactive mechanisms to make information easily available to the private sector was underlined. The private sector was also identified as a resource for generating innovative ideas and entrepreneurship to contribute to meeting the objectives of the GPA. While the negative impacts of the tourism industry on coastal habitats were repeatedly noted, dialogue participants recognized the potential role of tourism in making Marine Protected Areas and conservation sustainable.

The dialogue on Physical Alteration and Destruction of Habitat featured specific examples from Colombia, Mexico and Jamaica.

Nutrients

In order to address the problem of excess nutrients in the coastal marine environment dialogue participants suggested the following types of cooperation: continuance of international and regional cooperation among all institutions, following up pollutants movement through the regional seas, monitoring and assessment of sea water quality and building up a international control centre.

With specific reference to the contribution of agricultural runoff, the need to decrease dependency on chemical over fertilization and move towards biological controls was suggested. With regards to sewage, it was noted that conventional sanitation systems are generally unsustainable, and alternative sustainable sanitation approaches exist and should be much more widely adopted. Sanitation should seek to prevent pollution at the source; conserve and use water efficiently; recycle nutrients; and apply appropriate low-cost, low-energy technologies for wastewater treatment. A similar approach, detailed in the *Provisional Guidelines for Decision-Makers on Household-Centred Environmental Sanitation (HCES)* was noted by another participant. The HCES approach places the household and its neighbourhood at the core of the planning process is based on the following three principles: 'effective' household demand; the concept of 'zones' – solving problems within the zone nearest to where the problems arise; and the use of a 'circular model', which emphasizes resource conservation and reuse to reduce waste disposal. However, it was underlined that a shift to the new sustainable sanitation paradigm would require a major commitment in terms of policy development, institutional reform, applied research and funding.

The link between integrated management approaches and nutrients was eloquently highlighted by one participant who said: "the art of managing the coastal zone is primarily the art of managing nutrients." The participant emphasised the devastating effects of nutrients on coral reefs — the most nutrient sensitive ecosystem — which are being killed by algae at nutrient levels that would be very low for any other system. Therefore only coral reef specific water quality standards can be used, which are much more stringent than for any other habitat. It was noted that around the world, the causes of algae overgrowth is almost always due to land-based sources of sewage or agricultural fertilizers and that the only fast, effective, and lasting method to get rid of nuisance algae that smother coral reefs and fisheries in expanding rings around population centres, is to absorb the nutrients and recycle them on land so they do not enter the coastal water.

Climate Change/Variations

As part of the dialogue a contribution was made on the effects of climate change/variations on large marine ecosystems. The issue was highlighted as cross-cutting and it was suggested that GPA should further mainstream and emphasise this issue, as well as playing a proactive advocacy role in sharing emerging scientific findings and preparing policy guidance for concerted action to accelerate both mitigation measures and adaptation to impacts of climate change on coastal and ocean ecosystems. The accelerating and unanticipated impacts of climate change/variations on fisheries was noted.